

# INTERNATIONAL SEARCH REPORT

Int'l Application No  
161,000/2004/027593

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C08J9/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C08J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 98/52997 A (ORBSEAL LLC ; TAYLOR DONALD (US); PACHL JEFFREY T (US)) 26 November 1998 (1998-11-26) the whole document	1-4, 24, 25, 29-35
X	US 4 540 718 A (SENDA KENICHI ET AL) 10 September 1985 (1985-09-10) the whole document	1-4, 24, 25, 29-35
X	US 4 045 378 A (MAXWELL CLIFFORD J) 30 August 1977 (1977-08-30) the whole document	1-4, 24, 25, 29-35
X	US 4 001 158 A (LINDEMANN MARTIN K) 4 January 1977 (1977-01-04) the whole document	1-4, 24, 25, 29-35
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

25 January 2005

Date of mailing of the international search report

08.02.2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel: (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Gloomm, B

**INTERNATIONAL SEARCH REPORT**

Int Application No  
PCT/US2004/027593

**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 740 353 A (PATRICK F ET AL) 19 June 1973 (1973-06-19) the whole document	1-4, 24, 25, 29-35
P, X	WO 2004/005383 A1 (BASF AKTIENGESELLSCHAFT; MALETZKO, CHRISTIAN; DIETZEN, FRANZ-JOSEF; KE) 15 January 2004 (2004-01-15) the whole document	5-23, 26-28
X	WO 02/18482 A2 (JSP CORPORATION; TAKAHASHI, SEIJI; KOGURE, NAOCHIKA; KITAHAMA, TAKASHI) 7 March 2002 (2002-03-07) the whole document	5-23, 26-28
X	US 6 541 105 B1 (PARK CHUNG P) 1 April 2003 (2003-04-01) the whole document	5-23, 26-28
X	WO 93/15132 A1 (THE DOW CHEMICAL COMPANY) 5 August 1993 (1993-08-05) the whole document	5-23, 26-28
X	EP 0 526 872 A1 (SANWA KAKO COMPANY LIMITED) 10 February 1993 (1993-02-10) the whole document	5-23, 26-28
X	US 5 100 924 A (SENUMA ET AL) 31 March 1992 (1992-03-31) the whole document	5-23, 26-28
X	US 5 132 171 A (YOSHIZAWA ET AL) 21 July 1992 (1992-07-21) the whole document	5-23, 26-28
X	US 4 931 484 A (HOVIS ET AL) 5 June 1990 (1990-06-05) the whole document	5-23, 26-28
X	US 4 877 814 A (ITO ET AL) 31 October 1989 (1989-10-31) the whole document	5-23, 26-28

## INTERNATIONAL SEARCH REPORT

application No.  
US2004/027593

### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
  
3.  Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1.  As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
  
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
  
3.  As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

1-35

4.  No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

#### Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-4, 24, 25, 29-35

Aqueous froth.

---

2. claims: 5-23, 26-28

Open-cell foam.

---

3. claim: 36

Aqueous dispersion.

---

**INTERNATIONAL SEARCH REPORT**

Information on patent family members				Int'l Application No	PCT/US2004/027593
Patent document cited in search report	Publication date	Patent family member(s)		Publication date	
WO 9852997	A 26-11-1998	AU 740660 B2 AU 7584098 A CA 2290423 A1 DE 69808283 D1 DE 69808283 T2 EP 0983312 A1 ES 2184264 T3 WO 9852997 A1 US 6444713 B1 US 2002058721 A1 US 2002115737 A1			08-11-2001 11-12-1998 26-11-1998 31-10-2002 31-07-2003 08-03-2000 01-04-2003 26-11-1998 03-09-2002 16-05-2002 22-08-2002
US 4540718	A 10-09-1985	JP 60152534 A JP 1756488 C JP 4046977 B JP 59187036 A AU 560618 B2 AU 2511484 A CA 1222100 A1 DE 3471671 D1 EP 0123816 A1 ES 8600348 A1 US 4617322 A			10-08-1985 23-04-1993 31-07-1992 24-10-1984 09-04-1987 11-10-1984 19-05-1987 07-07-1988 07-11-1984 01-01-1986 14-10-1986
US 4045378	A 30-08-1977	NONE			
US 4001158	A 04-01-1977	US 3933691 A CA 1039899 A1 DE 2501628 A1 FR 2257643 A1 GB 1463874 A IT 1026333 B JP 50101691 A			20-01-1976 03-10-1978 17-07-1975 08-08-1975 09-02-1977 20-09-1978 12-08-1975
US 3740353	A 19-06-1973	DE 2321394 A1 FR 2227285 A1 GB 1422617 A			07-11-1974 22-11-1974 28-01-1976
WO 2004005383	A1 15-01-2004	DE 10230583 A1			15-01-2004
WO 0218482	A2 07-03-2002	AU 8017701 A JP 2002146080 A			13-03-2002 22-05-2002
US 6541105	B1 01-04-2003	AU 765546 B2 AU 6152399 A BR 9913960 A CA 2339847 A1 EP 1114085 A1 HU 0103857 A2 JP 2002524636 T NO 20011348 A			25-09-2003 03-04-2000 03-07-2001 23-03-2000 11-07-2001 28-01-2002 06-08-2002 16-03-2001
WO 9315132	A1 05-08-1993	AT 177126 T CA 2128007 A1 DE 69228564 D1 DE 69228564 T2 DK 625168 T3 EP 0625168 A1			15-03-1999 05-08-1993 08-04-1999 02-09-1999 27-09-1999 23-11-1994

**INTERNATIONAL SEARCH REPORT**

 Int'l application No  
 PCT/US2004/027593

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 9315132	A1		ES 2127807 T3 GR 3029787 T3 JP 3393341 B2 JP 7503269 T MX 9300591 A1 NO 942888 A US 5567742 A	01-05-1999 30-06-1999 07-04-2003 06-04-1995 01-09-1993 03-08-1994 22-10-1996
EP 0526872	A1	10-02-1993	JP 3242150 B2 JP 5338054 A JP 3225316 B2 JP 5038766 A CN 1069691 A ,B DE 69211443 D1 DE 69211443 T2 US 5242634 A	25-12-2001 21-12-1993 05-11-2001 19-02-1993 10-03-1993 18-07-1996 28-11-1996 07-09-1993
US 5100924	A	31-03-1992	NONE	
US 5132171	A	21-07-1992	JP 4065443 A DE 4121831 A1 FR 2671804 A1 GB 2248030 A ,B	02-03-1992 09-01-1992 24-07-1992 25-03-1992
US 4931484	A	05-06-1990	CA 2008516 A1 DE 69031253 D1 DE 69031253 T2 EP 0405103 A2 US 5059631 A US 5277515 A US 5387050 A US 5098782 A	14-12-1990 18-09-1997 05-02-1998 02-01-1991 22-10-1991 11-01-1994 07-02-1995 24-03-1992
US 4877814	A	31-10-1989	JP 62057432 A JP 1893103 C JP 5011139 B JP 62064530 A CN 86106823 A ,B EP 0214858 A2	13-03-1987 26-12-1994 12-02-1993 23-03-1987 20-05-1987 18-03-1987